

**REMARKS**

Claims 1-3, 7, 11, 16, 17, 19-23, 25-27 and 34-51 are pending. Claims 4-6, 8-10, 12-15, 18, 24, and 28-33 were previously canceled. No claims are currently amended.

Reconsideration of the application is requested.

**§ 103 Rejections**

Claims 1, 7, 11, 16, 17, 19-23, 25, 26, 34, 35, 37-39 and 42 stand rejected under 35 USC § 103(a) as purportedly unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593) and anyone of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899).

Claims 2, 40, 41 and 43 stand rejected under 35 USC § 103(a) as purportedly unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of de Navas Albareda (US 4,056,593) and Jackson (US 5,699,593) and anyone of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899).

In order to establish a *prima facie* case of obviousness of a claim, all the claim limitations must be taught or suggested by the prior art; (see, e.g., *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970), cited at MPEP § 2143.03). In the present case, no *prima facie* case of obviousness has been established because the cited references fail to teach or suggest claim limitations recited in the present claims.

The Office Action recognizes that neither combination of references teaches stretching to "provide a stretched mechanical fastening laminate having a basis weight of less than 100 g/m<sup>2</sup>" as claimed in the rejected claims. The Office Action states:

The examiner recognizes that Buzzell et al. do not expressly recite all the claimed physical properties and effects. However, the combination employs the same claimed materials and performs the same claimed steps in the same claimed manner. As such, the examiner submits that the same claimed effects and physical properties are intrinsically achieved by the practice of the combined method (e.g. decreasing basis weight to a weight of less than 100 g/m<sup>2</sup> ). For example, Buzzell et al. teach the thickness of the web is reduced to a thickness as low as about

0.001 inches (col. 13, lines 26-36) (i.e. about 25 um) which is within the range set forth by the instant disclosure (US 2005/0202205; paragraphs [0062] and [0082]).

Applicants disagree at least with the statement that the combination employs the same claimed materials. The combinations of references require at least one element more than what is recited in the present claims. For example, with the inclusion of Jackson, a "plurality of discrete, multi-filament transversely expanded yarns" is required by the combinations in addition to the fibrous web layer and the thermoplastic web layer required by the present claims. These multi-filament transversely expanded yarns provide a loop fastening material that the rejections rely upon since the laminate made in Buzzell et al. is said to be a product having touch fastener hooks on one side and touch fastener loops on the other side. At least because the inclusion of Jackson in the combinations of references requires a "plurality of discrete, multi-filament transversely expanded yarns" that are not required by the presently rejected claims, the combination does not employ the same claimed materials. Therefore, the rejection does not meet the burden of showing that the limitation of the "stretched mechanical fastening laminate having a basis weight of less than 100 g/m<sup>2</sup>" is intrinsic (i.e., inherent) in the cited references.

According to MPEP § 2112 IV, "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.' Jackson does not disclose what the basis weight of the loop fastening material would be once the "plurality of discrete, multi-filament transversely expanded yarns" is attached to the "orientable backing substrate". The other references also do not provide insight into what the basis weight of the loop fastening material would be at this stage. A person having ordinary skill in the art could be sure, however, that the addition of a "plurality of discrete, multi-filament transversely expanded yarns" would increase the basis weight over that of the "orientable backing substrate" taught by Jackson. Jackson further teaches in col. 3, 42-45, "The precursor backing material after orientation will generally be thinner (generally by about 10 percent or more) in the regions between the attached yarns due to preferential orientation in these regions." If orientation occurs preferentially in regions not bonded to the yarns, a person skilled in the art may expect that the orientable backing substrate may stretch to a lesser extent overall in the presence of the yarns

than in the absence of the yarns, again tending to suggest an lower likelihood of decreasing the basis weight. Also, in col. 6, lines 37-40, Jackson states, "In the nip 27, the multi-filament yarns 12 are preferably spaced at a distance of 5 mm or less so that the spacing between adjacent yarns after transverse orientation is less than 10 mm, preferably less than 5 mm." The yarns are spaced fairly close together, and so their impact on increasing basis weight may be significant. For at least all of these reasons, a person having ordinary skill in the art would not have recognized that a "stretched mechanical fastening laminate having a basis weight of less than 100 g/m<sup>2</sup>" was inherent in the combinations of references.

Furthermore, a person having ordinary skill in the art, knowing that a "plurality of discrete, multi-filament transversely expanded yarns" must increase the basis weight over that of the "orientable backing substrate" taught by Jackson would not have reasonably looked to this combination of references to achieve "stretched mechanical fastening laminate having a basis weight of less than 100 g/m<sup>2</sup>". Accordingly, the rationale provided in the Office Action for combining the references, "for the purpose of employing a relatively inexpensive loop material that could be stretched", is insufficient.

At least for the reasons given above, the rejection of claim 1 under 35 USC § 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593) and anyone of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899) has been overcome and should be withdrawn, and the rejection of claim 2 USC § 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of de Navas Albareda (US 4,056,593) and Jackson (US 5,699,593) and anyone of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899) has been overcome and should be withdrawn.

Claims 7, 11, 16, 17, 19-23, 25, 26, 34, 35, 37-39 and 42 depend directly or indirectly from claim 1. Claim 1 is patentable for the reasons given above. Thus, claims 7, 11, 16, 17, 19-23, 25, 26, 34, 35, 37-39 and 42 are likewise patentable. Claims 2, 40, 41, and 43 depend directly or indirectly from claim 2. Claim 2 is patentable for the reasons given above. Thus, claims 40, 41, and 43 are likewise patentable.

In summary, the rejection of claims 1, 7, 11, 16, 17, 19-23, 25, 26, 34, 35, 37-39 and 42 under 35 USC § 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593) and anyone of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899) and the rejection of claims 2, 40, 41 and 43 under 35 USC § 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of de Navas Albareda (US 4,056,593) and Jackson (US 5,699,593) and anyone of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899) have been overcome and should be withdrawn.

Claim 3 stands rejected under 35 USC § 103(a) as purportedly unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593) and anyone of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899), as applied to claims 1, 7, 11, 16, 17, 19-23, 25, 26, 34, 35, 37-39 and 42 above, and further in view of Miller et al (US 6,054,091).

As described above in the response to the rejection of claims 1, 7, 11, 16, 17, 19-23, 25, 26, 34, 35, 37-39 and 42, the Office Action has not provided sufficient evidence that the combination of references intrinsically or inherently discloses a "stretched mechanical fastening laminate having a basis weight of less than 100 g/m<sup>2</sup>". Miller et al. does not provide the missing evidence. Furthermore, Miller et al. does not provide a reason why a person having ordinary skill in the art would look to Jackson, which requires a "plurality of discrete, multi-filament transversely expanded yarns", in order to achieve a "stretched mechanical fastening laminate having a basis weight of less than 100 g/m<sup>2</sup>".

Accordingly, the rejection of claim 3 under 35 USC § 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593) and anyone of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899), as applied to claims 1, 7, 11, 16, 17, 19-23, 25, 26, 34, 35, 37-39 and 42 above, and further in view of Miller et al (US 6,054,091) has been overcome and should be withdrawn.

Claim 36 stands rejected under 35 USC § 103(a) as purportedly unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593) and anyone of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899), as applied to claims 1, 7, 11, 16, 17, 19-23, 25, 26, 34, 35, 37-39 and 42 above, and further in view of either of Song et al. (US 5,534,215) or Gebler et al. (US 3,324,218).

As described above in the response to the rejection of claims 1, 7, 11, 16, 17, 19-23, 25, 26, 34, 35, 37-39 and 42, the Office Action has not provided sufficient evidence that the combination of references intrinsically or inherently discloses a "stretched mechanical fastening laminate having a basis weight of less than 100 g/m<sup>2</sup>". Neither Song et al. nor Gebler et al. provides the missing evidence. Furthermore, neither Song et al. nor Gebler et al. provides a reason why a person having ordinary skill in the art would look to Jackson, which requires a "plurality of discrete, multi-filament transversely expanded yarns", in order to achieve a "stretched mechanical fastening laminate having a basis weight of less than 100 g/m<sup>2</sup>".

Accordingly, the rejection of claim 36 under 35 USC § 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593) and anyone of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899), as applied to claims 1, 7, 11, 16, 17, 19-23, 25, 26, 34, 35, 37-39 and 42 above, and further in view of either of Song et al. (US 5,534,215) or Gebler et al. (US 3,324,218) has been overcome and should be withdrawn.

Claim 27 stands rejected under 35 USC § 103(a) as purportedly unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593) and anyone of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899), as applied to claims 1, 7, 11, 16, 17, 19-23, 25, 26, 34, 35, 37-39 and 42 above, and further in view of Romanko et al. (US 6,484,371) and Conway (US 5,778,457).

Claims 44, 45 and 47-51 stand rejected under 35 USC § 103(a) as purportedly unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593),

Romanko et al. (US 6,484,371), and Conway (US 5,778,457) and anyone of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899).

Claims 44, 45 and 47-51 stand rejected under 35 USC § 103(a) as purportedly unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Shepard et al. (US 6,598,276), Romanko et al. (US 6,484,371) and Conway (US 5,778,457).

Applicants submit that in the rejection of claim 27 and each of the rejections of claims 44, 45, and 47-51 a proper *prima facie* case of obviousness has not been made because the reasoning articulated in the Office Action for combining the references lacks the rational underpinning required by MPEP § 2141 III to support a legal conclusion of obviousness.

It is undisputed that Buzzell et al. suggests that the knitted material used to form the product shown in Fig. 13a functions as a loop for a hook-and-loop fastener. The rejected claims do not require a loop material and include the limitation that "the fibrous web layer is not exposed". The art relied upon in the rejections for providing a nonwoven web loop material teaches that manufacturing steps beyond those needed to make a nonwoven web are needed in order to make a functioning loop material. In Shepard et al., a batt of staple fibers is needle-punched to provide loops. In Jackson, a "plurality of discrete, multi-filament transversely expanded yarns" is adhered or otherwise attached to an orientable backing substrate, which could be a substantially consolidated nonwoven material. Why would a person having ordinary skill in the art and common sense go through the extra steps and expense to make a loop material on the opposite side of a hook material simply to incorporate the loop material into a backsheet of an absorbent article where it would not be exposed when other, more simple, less expensive fibrous materials could be used?

The Office Action states that Conway suggests "that such a configuration is effective for forming a sanitary napkin". However, Conway does not suggest that the opposite side of a hook material should be a loop material. In fact, Conway teaches about complications that arise when the pad upper surface 16 (Fig. 3) has yarn loops: multiple pads may not be able to be stacked on top of each other because the pads would stick together (see, e.g., col. 4, lines 48-55). Therefore, a person having ordinary skill in the art could readily envision difficulties of using hook materials with loops on the opposing side in manufacturing. When the "fibrous web layer is not

exposed" as required in the rejected claims and loops are not needed, why would a person having ordinary skill in the art risk these difficulties?

The Office Action further states, "Additional motivation is provided by Kennedy et al. in that Kennedy et al. further teach that a backing material further facilitates applications requiring adhesive/glue (col. 3, lines 5-15)." However, Kennedy et al. also do not suggest that the backing material should be a functioning loop material. In fact, one of the reasons for a backing material, discussed in Kennedy et al. from col. 2, line 53 to col. 3, line 5, is for ease of application of an adhesive so that a loop material can be adhered to the back of the hook material. If the backing material was already a functioning loop, there would be no need to adhere additional loop materials to it.

For at least these reasons, the rejections lack the rational underpinnings required to establish a proper *prima facie* case of obviousness.

Claim 27 is dependent from claim 1, and it is also patentable for the reasons given above in response to the rejection of claim 1. The rejection of claim 27 under 35 USC § 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593) and anyone of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899), as applied to claims 1, 7, 11, 16, 17, 19-23, 25, 26, 34, 35, 37-39 and 42 above, and further in view of Romanko et al. (US 6,484,371) and Conway (US 5,778,457) has been overcome and should be withdrawn.

The rejection of claims 44, 45 and 47-51 under 35 USC § 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Shepard et al. (US 6,598,276), Romanko et al. (US 6,484,371) and Conway (US 5,778,457) has been overcome and should be withdrawn.

The rejection of claims 44, 45 and 47-51 under 35 USC § 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593), Romanko et al. (US 6,484,371), and Conway (US 5,778,457) and anyone of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899) has been overcome and should be withdrawn.

Claim 46 stands rejected under 35 USC § 103(a) as purportedly unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Shepard et al. (US 6,598,276), Romanko et al. (US 6,484,371) and Conway (US 5,778,457), as applied to claims 44, 45 and 47-51 above, and further in view of Miller et al. (US 6,054,091).

Claim 46 stands rejected under 35 USC § 103(a) as purportedly unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593), Romanko et al. (US 6,484,371) and Conway (US 5,778,457) and anyone of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899), as applied to claims 44, 45 and 47-51 above, and further in view of Miller et al. (US 6,054,091).

As described above in the response to the rejections of claims 44, 45, and 47-51, a proper *prima facie* case of obviousness has not been made because the reasoning articulated in the Office Action for combining the references lacks the rational underpinning required by MPEP § 2141 III to support a legal conclusion of obviousness. Miller et al. does not remedy this deficiency. Therefore, claim 46 is patentable for at least the reasons given in the above response.

In summary, the rejection of claim 46 under 35 USC § 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Shepard et al. (US 6,598,276), Romanko et al. (US 6,484,371) and Conway (US 5,778,457), as applied to claims 44, 45 and 47-51 above, and further in view of Miller et al. (US 6,054,091) and the rejection of claim 46 under 35 USC § 103(a) as being unpatentable over Buzzell et al. (US 6,582,642), which incorporates Kennedy et al. (US 5,260,015) into the disclosure by reference, and further in view of Jackson (US 5,699,593), Romanko et al. (US 6,484,371) and Conway (US 5,778,457) and anyone of Martin (US 6,942,896) or Semjonow (US 4,187,586) or Steuber (US 3,169,899), as applied to claims 44, 45 and 47-51 above, and further in view of Miller et al. (US 6,054,091) have been overcome and should be withdrawn.

Applicants note that the Office Action does not address the limitation found in claim 45, "wherein the one or more nonwoven materials is calendered". It is therefore unclear from the

Office Action which art is relied upon for this limitation. The Office Action is therefore not complete as required by MPEP § 707.07.

In view of the above, it is submitted that the application is in condition for allowance. Examination and reconsideration of the application is requested.

Respectfully submitted,

May 24, 2010

Date

By: /Kathleen B. Gross/

Kathleen B. Gross, Reg. No.: 56,676

Telephone No.: 651-737-4757

Office of Intellectual Property Counsel  
3M Innovative Properties Company  
Facsimile No.: 651-736-3833